I. Summary of February 17, 2005 Interview

Applicants' representatives and their undersigned attorney presented new claim language for the solid support claims, presently pending as claims 3144 and 3145. Three sheets were presented and made of record for claims designated 3144, 3145 and 3145X. Applicants' representatives pointed out that the inclusion of "one or more amine(s), hydroxyl(s) or epoxide(s)" in the proposed language for claims 3144 and 3145 for fixing the nucleic acid to the non-porous solid support distinguished the present invention from Stuart et al., U.S. Patent No. 4,732,847. The Examiner hypothesized that the glass slide disclosed in Stuart's '847 Patent might provide a hydroxyl group for attaching a nucleic acid. Applicants' representatives and attorneys responded that the SiO_2 present in glass generally could be converted into a functional hydroxyl group capable of bonding to a nucleic acid only by extraordinarily harsh treatment conditions, such as boiling hydrochloric acid [see, for example, Cohen et al., "Covalent attachment of DNA oligonucleotides to glass," Nucleic Acids Research 25(4):911-912 (1997); copy attached as Exhibit A]. Stuart however was completely silent as to such conditions. Indeed, quite to the contrary, Stuart discloses use of a mild acid, such as acetic acid, for treatment of a slide. It is usually safe to assume that persons skilled in the art do not carry out extraordinary treatments, such as use of boiling concentrated HCl unless such conditions are viewed as necessary to achieve a desired end. Accordingly, the inference one can draw by use of such treatment in the afore-described Cohen publication supports the idea that a milder and cooler acid would not have sufficed.

Applicants' representatives also argued that the covalent attachment to the nucleic acid of either (1) a signaling moiety or (2) a bridging moiety (which bridging moiety is covalently or non-covalently attached to a signaling moiety) distinguished the invention of claim 3145X from Stuart's '847 Patent. Some discussion followed regarding the covalent attachment limitation in claim 3145X and as to whether it sufficiently distinguished the claimed subject matter from Stuart's disclosure.

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DM, 9-20-05